

The opinion in support of the decision being entered today was not written for publication and is not binding precedent of the Board.

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U.S. PATENT AND TRADEMARK OFFICE
BOARD OF PATENT APPEALS
AND INTERFERENCES

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte LARRY D. BARTO, STEVEN C. NETTLES and YIWEI LI

Appeal No. 2004-1748
Application 09/825,225

ON BRIEF

Before THOMAS, BARRETT and OWENS, *Administrative Patent Judges*.
OWENS, *Administrative Patent Judge*.

DECISION ON APPEAL

This appeal is from the final rejection of claims 1-26,
which are all of the claims in the application.

THE INVENTION

The appellants claim a system and method for controlling work-in-process (WIP) in a manufacturing facility, and claim a manufacturing facility that includes the system. Claim 14, which claims the method, is illustrative:

14. A method of controlling work-in-process ("WIP"), comprising:

determining when an evaluation cycle should be invoked; and

performing the evaluation cycle, the performing the evaluation cycle further including:

identifying a bottleneck workstation;

calculating a WIP value representing the amount of work approaching the bottleneck workstation;

determining whether the WIP value is projected to fall below a control limit during an evaluation period; and

recommending, if the WIP value is projected to fall below the control limit during the evaluation period, that a selected amount of additional work be released into a manufacturing line.

THE REFERENCE

Weaver et al. (Weaver)	5,446,671	Aug. 29, 1995
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THE REJECTION

Claims 1-26 stand rejected under 35 U.S.C. § 102(b) as being anticipated by Weaver.

OPINION

We reverse the aforementioned rejection.

Each of the appellants' independent claims requires that if a WIP value is projected to fall below a control limit during an evaluation period, a selected amount of additional work is released into a manufacturing line.

Weaver discloses a system for optimizing utilization of universal equipment that feeds a production step containing one or more potential bottlenecks (col. 1, lines 9-12). For each product having associated therewith a throughput bottleneck, a maximum queue quantity Q_{MAX} and a minimum queue quantity Q_{MIN} are determined by management personnel based on the capacity and cycle time of the product (col. 1, lines 55-60). When a machine completes a lot of a particular product at a production step P that precedes the bottleneck step B, a look-ahead method is initiated wherein the queue at step P is searched and the next lot to be processed is selected (col. 1, lines 61-66). If the next lot is a product for which Q_{MAX} and Q_{MIN} values have been assigned, then the queue quantity Q_{NOW} at step B is determined (col. 2, lines 3-6). If Q_{NOW} at step B is less than Q_{MAX} , or between Q_{MAX} and Q_{MIN} and Q_{NOW} is climbing upward from its Q_{MIN} and has not yet reached its Q_{MAX} value (i.e., there is a clear flag

status associated with the product), the lot is processed without further analysis (col. 2, lines 7-12). If Q_{NOW} at step B is greater than Q_{MAX} , or between Q_{MAX} and Q_{MIN} and Q_{NOW} is descending from its Q_{MAX} and has not yet reached its Q_{MIN} value (i.e., there is a set flag status associated with the product), the lot will not be processed until after all other lots meeting the conditions in the previous sentence have been processed (col. 2, lines 13-19). Newly selected products at step P have a threshold queue level Q_{THR} which is the number of lots of the product below which, for efficiency purposes, lots will not be processed until there are more lots queued at step P (col. 4, lines 33-45). Like the Q_{MAX} and Q_{MIN} values, the Q_{THR} values are set by management (col. 4, lines 45-47).

The appellants argue that "[t]here is no discussion in Weaver of releasing new work into a manufacturing line if a WIP value is projected to fall below a particular level" (brief, page 7).

The examiner argues that "[t]he basic requirements of the disputed claim limitation are that when the WIP amount is at a certain level, additional work should be introduced to manage the workflow" (answer, page 7). Weaver discloses, consistent with the examiner's argument, that a set flag status is cleared whenever the queued lot quantity at step B for a particular product drops below that product's assigned Q_{MIN} (col. 6, lines 51-52).


The appellants' claims, however, do not require that new work is released into a manufacturing line when the WIP amount is at a certain level. Instead, the claims require that new work is released into a manufacturing line when the WIP amount is *projected* to fall below a certain level. The examiner has not established that Weaver discloses that claim requirement. Hence, the examiner has not carried the burden of establishing a *prima facie* case of anticipation of the appellants' claimed invention.

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DECISION

The rejection of claims 1-26 under 35 U.S.C. § 102(b) over Weaver is reversed.

REVERSED


JAMES D. THOMAS
Administrative Patent Judge

Lee E. Barrett
LEE E. BARRETT
Administrative Patent Judge

Terry J. Owens
TERRY J. OWENS
Administrative Patent Judge

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